

What is claimed is:

1. A treatment for streptococcal throat infection comprising:

An extraction reagent comprising Group C streptococcal
phage associated lysin enzyme; and

an oral delivery mode for delivering said Group C
streptococcal phage associated lysin enzyme, said group C
streptococcal phage associate lysin enzyme being in said oral
delivery mode.

2. The treatment for streptococcal throat infection
according to claim 1, wherein said oral delivery mode is selected
from the group consisting of a candy, chewing gum, lozenge, troche,
tablet, a powder, an aerosol, a liquid and a liquid spray.

3. The treatment for streptococcal throat infection
according to claim 1, further comprising:

a phosphate buffer for maintaining the enzyme in an
environment having pH range between about 4.0 and about 8.0.

4. The treatment for streptococcal throat infection
according to claim 3, further comprising:

the phosphate buffer for maintaining the enzyme in an
environment having a PH range between about 5.5 and 7.5.

5. The treatment for streptococcal throat infection according to claim 2, further comprising a sugar substitute in said oral delivery mode.

5 6. A method for the treatment of streptococcus A exposure comprising:

applying an effective dosage of a pharmaceutically acceptable amount of:

an extraction reagent comprising Group C streptococcal phage associated lysin enzyme to the oral mucosa of a mammal in need of treatment;

permitting the extraction reagent to remain in contact with the oral mucosa for a period of time necessary for the lysin enzyme to saturate the oral mucosa; and

applying additional dosages of such the lysin enzyme in like fashion until treatment is complete.

7. The method for the treatment of streptococcus A exposure according to claim 6, wherein said treatment is therapeutic.

8. The method for the treatment of streptococcus A exposure according to claim 6, wherein said treatment is prophylactic.

9. The method for the treatment of streptococcus A exposure according to claim 6 wherein an effective dosage comprises an amount which is sufficient to provide an enzyme concentration of

between about .1 mM and 1 M in the saliva of the mammal being treated.

10. The method for the treatment of streptococcus A exposure according to claim 9, wherein the effective dosage comprises the amount which is sufficient to provide the enzyme concentration of between about 1 mM and about 300 mM in the saliva of the mammal being treated.

11. The method for the treatment of streptococcus A exposure according to claim 10, wherein the effective dosage comprises the amount which is sufficient to provide the enzyme concentration of between 5 mM and about 50 mM in the saliva of the mammal being treated.

12. The method for the treatment of streptococcus A exposure according to claim 6, wherein the mammal being treated is a human.

13. The method for the treatment of streptococcus A exposure, according to claim 6, wherein a dosage form is selected from the group consisting of a candy, chewing gum, lozenge, troche, tablet, a powder, an aerosol, a liquid and a liquid spray.

14. The method for the treatment of streptococcus A exposure according to claim 6, wherein said extraction free agent comprises

a stabilizing buffer to allow optimum activity of said lysin enzyme.

15. The method of claim 14, wherein the stabilizing
5 buffer comprises a reducing reagent.

16. The method of claim 15, wherein the reducing reagent is dithiothreitol.

10 17. The method of claim 14, wherein said extraction reagent is a lyophilized reagent which is reconstituted with liquid.

15 18. The method of claim 14, wherein the stabilizing buffer comprises a metal chelating reagent.

19. The method of claim 14, wherein the metal chelating reagent is ethylenediaminetetraacetic acid disodium salt.

20 20. The method of claim 14, wherein the stabilizing buffer comprises a citrate-phosphate buffer.

21. The method of claim 14, wherein the stabilizing buffer has a pH value in the range from 5.0 to 9.0.

22. The method of claim 14, wherein the stabilizing buffer comprises a bactericidal or bacteriostatic reagent as a preservative.

5 23. An oral delivery means for the therapeutic or prophylactic treatment of Streptococcal C exposure, said means comprising:
Group C streptococcal phage associated lysin enzyme; and
an oral delivery mode for delivering said Group C streptococcal phage associated lysin enzyme, said Group C streptococcal phage associated lysin enzyme being in said oral
10 delivery mode.

24. The oral delivery means of claim 23 wherein an effective dosage comprises an amount which is sufficient to provide an enzyme concentration of between about .1 mM and 1 M in the saliva of the mammal being treated.

25. The oral delivery means of claim 23, wherein said oral delivery mode is selected from the group consisting of a candy, chewing gum, lozenge, troche, tablet, a powder, an aerosol, a
20 liquid and a liquid spray.

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